



**BANBROS ENGINEERING PVT. LTD.**

The Precision Measurement People

# DIGITAL MICROSCOPE FOR INDUSTRIAL INSPECTION

- *VALUE*
- *VERSATILITY*
- *PERFORMANCE*



**BSZ-500HD LCD**

**DESCRIPTION:**

The **BSZ-500HD LCD** is a completely self-sufficient inspection system, designed to simplify and improve efficiency in your workflow. It starts with a high-quality, zoom optical system which moves effortlessly through the optimal magnification range for PCBs, machined parts, forensics, and dissection. The high-performance imaging system renders real-time, no-lag video on the 11.6" screen with extreme clarity. As you capture photos, the internal software provides an extensive set of measurement functions to analyze and take notes.

**Zoom Optics:**

The zoom objective lens provides 0.7X to 5X optical magnification to cover a wide range of subjects, and is ideally suited for dissection, soldering, and machining. The use of a single objective eliminates the inconsistent focus and distortion caused by lens-tilt seen with stereo microscopes. Each key magnification in the zoom range has a detent for improved repeatability, especially when performing measurements.

**1080p Digital Imaging:**

The built-in camera and 11.6" high-definition screen bring images to life with clarity and precision. By making use of HDMI streaming, live images are rendered in real time without lag at a smooth 60fps. Use the included wireless mouse to navigate the on-screen controls, then capture and edit photos using a variety of measurement tools. Each magnification can use its own calibration setting to accurately draw and measure lines, arcs, ellipses, and more. Files can be saved to external USB devices such as drives and card writers.

**Ergonomics and Illumination:**

The microscope is pre-mounted to a tabletop stand, which features a large base for stability, and rack-and-pinion focus. Focus is controlled by symmetrical knobs with adjustable tension located on either side of the track-style column. A clip-on LED ring light can be easily detached or attached to the head as needed, and provides bright, even, low-heat illumination. Brightness and magnification controls are ergonomically grouped together to promote an efficient workflow.

**FEATURES:**

- An all-in-one digital inspection system for industrial and laboratory use, complete with high-definition imaging, a large 11.6" screen, and a 144-LED ring light.
- 0.7X-4.5X zoom magnification is ideal for dissection, soldering, and general inspection, and detents at key magnifications ensure ease and consistency.
- Real-time, high-definition images are displayed on the 11.6" screen with superb clarity and accurate colors.
- The large base provides stability as well as an ample work surface, while symmetrical focusing knobs provide a large travel range to suit various objects.
- A 144-LED ring-light can be quickly attached or detached as needed, and illuminates' subjects with low-heat, daylight-balanced light.

**TECHNICAL SPECIFICATION:**

<b>Model No.</b>	<b>BSZ-500HD LCD</b>
<b>Lens</b>	
<b>Optical System</b>	Finite-conjugate
<b>Objective Magnification</b>	0.7X-4.5X zoom with detent
<b>Objective Numerical Aperture</b>	0.024-0.087
<b>Integrated Reduction</b>	0.35X
<b>Working Distance</b>	100mm
<b>Camera</b>	
<b>Sensor</b>	Sony IMX307 (color)
<b>Sensor Type</b>	CMOS
<b>Sensor Optical Format</b>	1/2.8"
<b>Active Pixels</b>	2M (1920 x 1080)
<b>Pixel Size</b>	2.9µm x 2.9µm
<b>Active Sensor Area</b>	5.57mm x 3.13mm
<b>Shutter</b>	electronic rolling shutter
<b>Monitor</b>	
<b>Display Size</b>	11.6"
<b>Monitor Magnification</b>	46X
<b>Displayed Magnification</b>	11.3X-72.5X
<b>Native Resolution</b>	1920 x 1080
<b>Aspect Ratio</b>	16:9
<b>Stand</b>	
<b>Stand Type</b>	Table stand with track
<b>Base Dimensions</b>	320mm x 260mm x 20mm
<b>Column Dimensions</b>	Height: 299mm Depth: 54mm
<b>Illuminator</b>	
<b>Illuminator Type</b>	144-LED ring light
<b>General</b>	
<b>Power Requirements</b>	110-240VAC, 50-60HZ, auto-switching wide-band

**CONTENTS:**

- One microscope
- One monitor
- Three mounting screws
- One USB mouse
- One USB hub
- One 32GB USB flash drive
- One AC power adapter